



CARSWELL/PLANT 4 RESTORATION ADVISORY BOARD

**Fact Sheet #3
May 13, 1999**

NAS FORT WORTH JOINT RESERVE BASE (JRB) INSTALLATION RESTORATION PROGRAM (IRP)

This is the third in a series of fact sheets focusing on the Installation Restoration Program (IRP) at the Naval Air Station Fort Worth Joint Reserve Base (NAS Fort Worth JRB). The NAS Fort Worth JRB, formerly Carswell Air Force Base, is in the process of planning and conducting activities for the identification, remediation, and closure of contaminated sites at the base.

The IRP is the Department of Defense's (DoD) primary mechanism for environmental response actions on U.S. Air Force installations. IRP activities are governed by provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and other applicable Federal and state regulations. These activities are being conducted through the combined efforts of the Air Force Center for Environmental Excellence (AFCEE) and the Air Force Base Conversion Agency (AFBCA). Under provisions of the Resource Conservation and Recovery Act, the Air Force identified 68 solid waste management units (SWMU) and 19 Areas of Concern (AOC) for further study and cleanup, if necessary.

CARSWELL ON-BASE

THREE NEW AREAS OF CONCERN TO BE INVESTIGATED

During aerial photographic reviews conducted by the Air Force for sites within the NAS Fort Worth JRB property boundaries, it was observed that one additional landfill (AOC 17) and two additional fire training areas (AOCs 18 and 19) may have existed in the past. As a result, these sites will be investigated to determine whether any hazardous constituents handled at the sites may have been released to the environment. This investigation is scheduled to be conducted in the fall of 1999.

BASEWIDE GROUNDWATER MONITORING CONTINUES

The Air Force samples groundwater at locations basewide four times a year to monitor the status of the contaminant plumes and to provide information for establishing trends. The current program (called Basewide Quarterly Groundwater Sampling and Analysis Program, or GSAP) has been in place since April 1995. Quarterly events occur in January, April, July, and October of each year. The most recent round

of quarterly monitoring was completed last month. Preparations of an annual report that summarizes 1998 groundwater monitoring results are currently under way. The draft version of this report will be

completed this month.

AREA OF CONCERN 4 SITE INVESTIGATION REPORT RE-SCHEDULED FOR EARLY MAY

AOC 4 includes the area of the former fuel hydrant system at the base. The fuel hydrant system was used to transfer aviation fuel from the bulk storage facility to fuel hydrants located along the flightline. These hydrants then were used to fuel the aircraft. The fuel hydrant system was removed from service in 1994, and during the removal of the system, contamination from the chemicals that comprise aviation fuel was detected. The Site Investigation (SI) for AOC 4 was completed in January, and, the Internal Draft Site Investigation Report was submitted to AFCEE for review in April. The draft version of the report is scheduled to be submitted to the regulators this summer.

RCRA FACILITY INVESTIGATION OF LANDFILLS CONTINUES

RCRA Facility Investigations (RFI) continue at seven former landfills, also known as SWMUs. These landfills include SWMU 17 (Landfill No. 7), SWMU 26 (Landfill No. 3), SWMU 27 (Landfill No. 10), SWMU 28 (Landfill No. 1), SWMU 29 (Landfill No. 2), SWMU 30 (Landfill No. 9), and SWMU 62 (Landfill No. 6). The results of the RFIs will determine if a source of potential contamination exists, and, if so, if the source has impacted the soil, groundwater, surface water, or sediments at or near the site. The results of the RFI also will be used to determine which Texas Natural Resource Conservation Commission (TNRCC) Risk Reduction Standard (RRS) is appropriate for closure of the units. If the concentrations of contaminants detected are all below background, then a request will be forwarded to the TNRCC for closure with no further action necessary. If the sites have chemicals at concentrations above background levels, then additional efforts will be accomplished that may include remediating the sites. The first RFI report was submitted to AFCEE for internal review in March and was prepared for Landfill 10. This RFI recommended no further action at this site since a release of hazardous constituents to the environment did not occur. RFI reports for three other landfills (Landfills 3, 6, and 7) are in the process of being drafted. The three remaining landfills (Landfills 1, 2, and 9) require additional field sampling before the RFI reports can be prepared. All of the RFI reports are expected to be completed in the summer/fall of 1999.

WASTE ACCUMULATION AREA INVESTIGATION FIELD WORK SCHEDULED

The field investigation of 13 Waste Accumulation Areas (WAA), one storage shed, the RV storage area, and an aerospace ground equipment shop wash rack at the base is scheduled to begin later this month. The WAAs consist of small storage sheds that housed hazardous wastes prior to transferral to the central storage facility. Examples of the most common wastes stored at these facilities included used solvents, spray cans, dirty rags, and used batteries. The Work Plans for the RFI were approved by the TNRCC in late 1998, and, currently, drilling, analytical, and other support contractors are being lined up to initiate the work. The investigation will consist of approximately 54 soil borings which will be sampled every 5 feet from ground surface to the top of the water table. If the results of the soil investigations show evidence of a release of hazardous constituents to the environment, a downgradient monitoring well will be installed in order to assess the impact to groundwater, if any. Each investigation generally will consist of a few soil borings and one downgradient monitoring well, as necessary. The results of the investigation will be compiled in an RFI report which is expected to be submitted to AFCEE for internal review in

December 1999.

SOLID WASTE MANAGEMENT UNIT 13 RECOMMENDED FOR CLOSURE

A Draft Technical Memorandum was submitted for regulatory review recommending closure of SWMU 13. SWMU 13 consisted of four WAAs within the Visual Information Center Work Station, formerly located within Building 1710. These WAAs were used to capture waste from photographic processing equipment before it was either disposed of into the sanitary sewer system or processed through the Defense Property Disposal Office for off-base recycling. SWMU 13 is recommended for closure based on the conclusion that a release of hazardous constituents from the unit did not occur. The TNRCC approved the request for closure of SWMU 13 on April 28, 1999.

UNDERGROUND STORAGE TANK INVESTIGATION FIELD WORK SCHEDULED

During the closure/realignment process at Carswell AFB, an agreement was signed whereby the Air Force would be responsible for cleaning up any contamination from Underground Storage Tanks (UST) at the base that occurred prior to October 1, 1994. In late 1998, the Air Force and Navy agreed which USTs would require additional investigation, and the Air Force completed a plan for investigating those tanks which require additional data before closure. The plans were submitted to the TNRCC on February 5, 1999, and the investigation is scheduled for completion this summer. The investigation will include geophysical or soil gas surveys at selected sites where the existence or location of abandoned or former USTs is in question. In addition, the investigation will include soil boring installation and soil sampling; monitoring well installation; and groundwater sampling from new and existing monitoring wells to determine if a release from any of the USTs has occurred.

CARSWELL OFF-BASE

FIELD EVENTS

Soil and groundwater sampling at AFBCA sites was conducted at the Aerospace Museum, Grounds Maintenance Yard, Golf Course Maintenance Yard, and the Unnamed Stream in March 1999. Results of this sampling event are not yet available. Dependent upon these results, remedial action will be determined if necessary.

RCRA FACILITY INVESTIGATION AT AFBCA LANDFILLS

RCRA Facility Investigations (RFI) continue at four former landfills. These landfills include Landfills No. 4, 5, 8, and Waste Pile 7. Further sampling will take place later this month or in early June. The results of the RFI will determine if a source of potential contamination exists and if the source has impacted the

soil, groundwater, surface water, or sediments at or near the site. The results of the RFI also will be used to determine which TNRCC Risk Reduction Standard (RRS) is appropriate for closure of the units. If all of the values are below background, then a request will be forwarded to the TNRCC for no further action. If the sites have constituents above background concentrations, then additional efforts will be required that may include the remediation of the sites.

SANITARY SEWER SYSTEM RCRA FACILITY INVESTIGATION

Funding has been requested to continue Phase II of the RFI. Phase II includes soil and groundwater sampling and the installation of eight new monitoring wells to determine the nature and extent of contamination. This field effort is scheduled for this summer. The results of the RFI will be used to determine which TNRCC RRS is appropriate for closure of the unit. If the values are all below background, then a closure with no further action will be requested. If the sites have chemicals above background concentrations, then additional efforts will be required that may include remediation of the sites.

RAILROAD RIGHT-OF-WAY AND RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AREA

Field investigations have been completed for both of these sites. The TNRCC is reviewing the final reports and closure letters are expected by June 1999.

OFF-SITE WEAPONS STORAGE AREA

The final RFI report for the Off-Site Weapons Storage Area is being finalized. Minimal remediation will take place including soil excavation in limited areas. This field effort is scheduled for this summer.

BUREAU OF PRISONS HOSPITAL

The visual site inspection for the Finding of Suitability to Transfer (FOST) was completed in March 1999. The property transfer is scheduled to be completed this summer.

McNAUGHTON HOUSE

A Draft FOST and Supplemental Environmental Baseline Survey (SEBS) were submitted to the TNRCC and U.S. Environmental Protection Agency (U.S. EPA) last month. The property transfer is scheduled to be completed this summer.

AIR FORCE PLANT 4

FISH TISSUE SAMPLING PROJECT UNDER WAY

The U.S. Geological Survey (USGS) and the Texas Department of Health (TDH) began a fish tissue sampling project at Lake Worth the week of March 29, 1999. This sampling is in response to an indeterminate finding identified in the recently published Public Health Assessment (PHA).

In July 1998, the Agency for Toxic Substances and Disease Registry (ATSDR), in conjunction with the TDH, published the PHA for the Air Force Plant 4 (AFP 4) area. The aim of the assessment was to determine 1) if people are being exposed to hazardous substances via Lake Worth, 2) if exposed to hazardous substances, whether the exposure is harmful, and 3) if there is harmful exposure, what action should be taken. In the assessment, the ATSDR and TDH evaluated all relevant environmental and health information about the site. The assessment identified several situations which may allow people to come into contact with contaminants in the foodchain, sediment, surface water, soil, and groundwater. The overall evaluation concluded that AFP 4 presents no apparent public health threat; however, it also described an area that requires additional investigation.

The assessment identifies an indeterminate public health hazard at AFP 4. The term *indeterminate public health hazard*, as used here, refers to the possibility of contamination finding its way through the aquatic foodchain and into Lake Worth's edible fish, such as large mouth bass, carp, drum, catfish, and buffalo fish. These fish may be susceptible to absorption in their tissues of the types of contamination found in the AFP 4 area. Because long-term exposure to the contaminants could pose a public health hazard, the ATSDR and TDH recommended that edible fish tissues be collected from Lake Worth for analysis.

The USGS collected samples of each species for analysis, with at least five samples from the area adjacent to the confluence of Meandering Road Creek and Lake Worth. The USGS's National Water Quality Laboratory is analyzing the tissue samples for trace metals and certain organic compounds. A report of the findings will be sent to the TDH. The USGS then will provide the Air Force with an Open-File Report on the project, probably by late September 1999. If the investigation into the indeterminate public health hazard finds that contamination in the edible fish in Lake Worth could be a public health hazard, then limits to fishing or a complete fishing ban may be implemented and the conclusion category for the overall site may change.

The PHA determined that the other possible exposure situations, such as contamination of soil, sediment, surface water, and air, present no apparent health hazard to the public. Although people may indeed come into contact with contamination, it is unlikely that this contact would be of any health concern. For example, exposure to contamination in sediments would typically be short-term and infrequent, and actual exposure through skin contact or incidental ingestion would be limited. Concentrations of contaminants in surface water are low and, with the exception of silver, below health-based screening levels. Air contaminant concentrations were well below those that would pose a public health hazard.

The Air Force and the USGS held an informational meeting on March 29, 1999, to present the project. The meeting was open to the public, and attendees included members of the AFP 4/Carswell Restoration Advisory Board, representatives from various local and state government offices, and members of the surrounding communities.

CONTINUED SAMPLING ACTIVITY IN CARSWELL RESIDENTIAL AREA

Shallow groundwater contamination from the AFP 4 TCE plume and several Carswell Field sites is being investigated through sampling of monitoring wells in the Wherry Housing area. (See map on adjacent page.) This sampling effort will support an upgrade to the existing treatment system and the selection, design, and installation of a final cleanup action for the area. Groundwater in a near-surface aquifer known as the Terrace Alluvium is being checked for contamination. This water is not a source of local drinking water, and any contamination would pose no apparent risk to local residents. The existing treatment system may be expanded based on data obtained from new monitoring wells that will be installed along White Settlement Road. These monitoring wells are scheduled to be installed within the next month. Some of these new wells may be used as extraction wells as necessary.

The sampling is a continuation of existing cleanup actions for the area. A pump and treat system was installed at the Carswell Golf Course area where White Settlement Road meets the flightline area of NAS Fort Worth JRB and became operational in December 1993. This system treats groundwater contamination coming from a large TCE plume emanating from AFP 4, two Carswell Field landfills, and a waste pile. A previous action at the waste pile removed a number of solvent drums, while an ongoing Corrective Measures Study helps determine the best action for eliminating health risks from soil contamination at these sites. A Focused Feasibility Study for the Carswell Golf Course is evaluating alternatives for treatment of the TCE plume and should be completed by December 1999. Actions also are being evaluated to prevent further plume migration from the flightline area to the golf course.

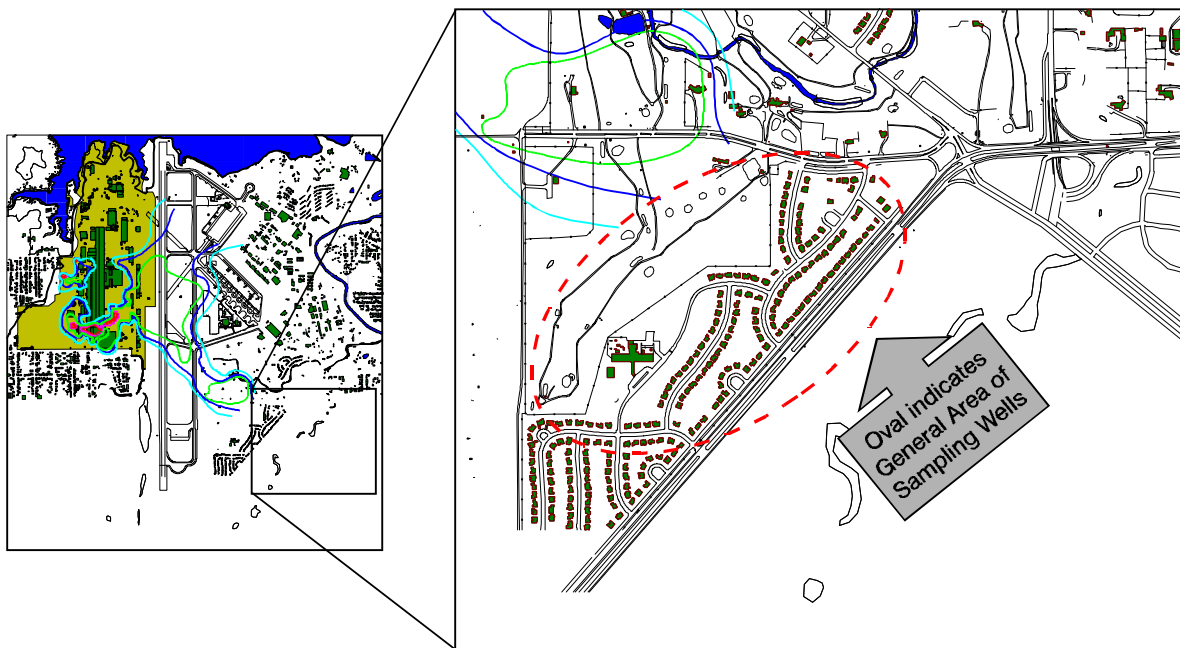
FOR MORE INFORMATION

If you would like more information, please see our web site at www.hgl.com/nasfw/ or contact the following individuals.

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Groundwater Sampling in the Wherry Housing Area